PHILIPS

Philips Medical Systems
Development and Manufacturing Centre

SERVICE MANUAL
732
UNIT

Release Bulletin PCR User Terminal

RIS Option R 1.5 L1

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SERVICE MANUAL - UNIT

Release Bulletin PCR User Terminal
RIS Option R 1.5 L1

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In case there are any questions concerning this manual,
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1...6 (01.0)

RIS Interface Specification PCR USIT 1.5 FM-RAD-D- 956/00, 20.12.2000

Floppy 4512 116 03901 (only to factory)

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1 Introduction

In this document you will find the instructions to install and configure the RIS option software.
The information contained in this bulletin has been carefully checked and is believed to be entirely reliable. However, as Philips Medical Systems improves the reliability, function, and design of their products, the possibility exists that information may not be current.

Supplied Software
PCR User Terminal Software R1.5 L1 ..... 4512 201 01141
RIS Option Installation Diskette + Option Bulletin + RIS Interface Specification

Applicable Documents
Service Manual PCR User Terminal ..... 4512 984 0490.
Release Bulletin PCR User Terminal R1.5 L1 ..... 4512 984 24761

What's new ...
(compared with release 1.4 L3)

- Blanks and '#' are allowed in the procedure code names.
- If a RIS file contains known and unknown procedure codes than the known procedure codes will be processed. The certain RIS file will also be moved into the error directory for a later evaluation.

Abbreviations And Acronyms

FTP ..... File Transfer Protocol
HIS ..... Hospital Information System
NFS ..... Network File System
PCR ..... Philips Computed Radiography
RIS ..... Radiology Information System
USIT ..... PCR User Terminal
Server USIT ..... USIT with the Reader connected to it and with the database

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2 Software Installation

Prerequisites:
- The same release/level of the PCR User Terminal software is installed on the USIT.
- The operation of the USIT in service mode is known from the Release Bulletin PCR User Terminal.

Note: The RIS option has to be installed at the Server USIT only!

Procedure:

- At the Server USIT select the service menu ***OS/2 command shell***.
- Insert the **RIS Option Installation Diskette** into the floppy drive.
- Type in **a:install** <Enter> to start the installation.

```
Install RIS Option for
PCR User Terminal R1.4
Copying the RIS files
Changing configuration ...
```

- When the RIS option has been successfully installed the system prompts with:

```
RIS Schedule Server installed.
```

- Next message:

```
Activate Bi-Directional RIS Interface [Y/N] : N_
```

The default is '**No**' , that means no information will be sent back to RIS/ HIS.

- Next message, if the previous message was programmed to **'Yes'** :

```
RIS File Output for RIS sourced files only [Y/N] : Y_
```

The default is '**Yes**' , that means any information will only be sent back to RIS/ HIS if the examination was scheduled via RIS/ HIS.

- Remove the diskette from the floppy drive.
- Re-start the USIT to make changes effective.

The RIS option is now installed and activated.

3 Deinstallation

- At the server select the service menu: ***OS/2 command shell***.
- Enter the command: **ris_off**
- Reboot the PCR User Terminal(s) to make changes effective.

The last configuration will be kept automatically on hard disk.
To activate the RIS this option must be installed again.

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4 Configuration

The contents of the files transmitted between RIS/ HIS and the USIT may be adapted on both sides.
In the following the configuration of the USIT is described.

4.1 RIS File

- At the Server USIT select the service menu ***OS/2 command shell***.
- Enter **ris_cfg** and <Enter>.

  The RIS Interface Configuration tool will be started.
  The RIS keywords, formats and parameter can be changed easy.
  For details see appended RIS Interface Specification or press <h> for online help.

4.2 Procedure Codes

If procedure codes from RIS/ HIS are used:

- Select the service menu ***Reconfigure PCR User Terminal/ Configure Procedure Codes***.

  A special procedure code editor will be started.
  The procedure codes are part of the anatomy database.
  For details see Release Bulletin PCR User Terminal, chapter Procedure Codes.
  Note: All procedure codes of the RIS/HIS have also to be programmed at the PCR User Terminal.

If procedure codes from RIS/ HIS are not used:

- Select the service menu ***OS/2 command shell***.
- Type in **exchange** and press <Enter> to set the USIT to Patient Data Exchange Mode.

  Alternatively the parameter **PatientDataExchange** can be set to '1' via the RIS Interface Configuration tool.

Explanation:
By default the PCR RIS Interface program is in **Schedule Mode**, which means that at least one valid procedure code must be found in a RIS interface file to schedule patients for certain examinations.

For a less powerful Hospital Information System (HIS) the **Patient Data Exchange Mode** is possible which also allows the introduction of patient demographic data into the PCR database without scheduling. In that case scheduling must always be done on the USIT. In this mode, scheduling by Procedure Code is still possible.

Type in **schedule** and press <Enter> if you want to set the USIT back to the schedule mode.

4.3 Checking the Configuration

- Select the service menu ***OS/2 command shell***.
- Copy a RIS file either via floppy diskette or FTP/ NFS into the path **c:\data\ris\input** of the USIT.
- Type in **ris_test filename** (filename = name of the copied RIS file)

  If the RIS file is not copied into the current directory [C:\diagnost], the full path has to be added to the name of the file. A special test program will be started to compare the RIS input file with the current configuration.

Corrupted RIS input files will be moved from the path **c:\data\ris\input** into the path **c:\data\ris\error**.

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4.4 Backup/ Restore of RIS Configuration

- Select the service menu ***OS/2 command shell***.
- Insert a back-up diskette into the floppy drive.
- Copy the configuration file with the command: **copy c:\user\usit\ris_cfg.ini a:**

  For restoring the configuration enter the command: **copy a:\ris_cfg.ini c:\user\usit**

5 Explanations

What is a Radiology Information System (RIS)?

A RIS is used to manage patient related data (ID, name, birthday...) within a radiology department. Most RIS' are able to export the patient data to other modalities like the PCR system. The patient data can be used by the PCR system without entering the data again. Scheduling examinations for a PCR patient can also be done by the RIS using so-called Procedure Codes.

A Hospital Information System (HIS) is usually just able to handle patient related data without the ability for scheduling or accounting.

How does a RIS talk to the PCR system?

The two most common ways to transfer data from RIS to the PCR system are done via NFS or FTP to the USIT. There is a specific directory called **c:\data\ris\input** in the USIT file system where the RIS must send the patient information to (RIS interface file). These interface files are plain ASCII text files, i.e.:

```
PATIENT_ID              (15)
PATIENT_DICOM_NAME      (64)   or  PATIENT_LAST_NAME    (24)
PROCEDURE_CODE          (20)
-------------------------------------------------------------
PATIENT_FORE_NAME       (19)      )  input elements only
PATIENT_MIDDLE_NAME     (19)      )
ACCESSION_NUMBER        (16)
STUDY_UNIQUE_ID         (64)
PATIENT_BIRTHDAY        (10)
PATIENT_GENDER          (1)
EXAM_TIME               (8)
EXAM_DATE               (10)
STUDY_LOCATION          (16)
PATIENT_LOCATION        (16)
PHYSICIAN               (64)
DIAGNOSIS               (64)
EXAM_NAME               (15)      )
VIEW_NAME               (15)      )
FILM_LAYOUT             (16)      )
FILM_COPIES             (2)       )  output elements only
RIS_SOURCED             (1)       )
LAYOUT_POSITION         (2)       )
IMAGE_SEQUENCE          (2)       )
DEFAULT_IMAGE_COUNT     (2)       )
```

The first three RIS elements are a must of an input file.
The max. number of characters of each entry is given in brackets.
For detailed information refer to the attached RIS Interface Specification.

By the way, the mount command for a UNIX based RIS would be for example:

```
mount -F nfs 192.0.0.2: c:\data\ris\input  /xyz
```

where the directory /xyz is a directory which has to be created on the UNIX computer.

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